Essay: Improving the Practice and Teaching of Instructional Design

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About 15 years ago, I wrote an initial proposal for a journal that would address the practice of instructional design. Then in 2010, I had the opportunity to develop the idea and propose the development of the *Journal of Applied Instructional Design.* The goal of this journal was to bridge the gap between theory and practice of instructional design by providing practitioners and academics a means for exploring the practice of instructional design. At the time, there was not an applied instructional design journal with high scholarly standards. It was my goal to propose a journal that could provide a means for practitioners and academics to make significant contributions that would lead to improvements in practice, teaching, and study of instructional design. The following essay focuses on the importance of this journal and the contribution it can make to the field of instructional design. I am using the term practitioner for instructional designers who work designing instruction in a variety of settings and academics to refer to faculty in higher education.

I proposed a journal that would be peer reviewed to ensure high quality articles. This journal, however, would not focus on rigorous research design and data collection standards we expect in *ETR&D.* Rather, I wanted to encourage practitioners and practitioners and academics to collaborate on quality research and conceptual articles based the practice of instructional design. For example, a practitioner working in industry might not have the resources or time to conduct a highly controlled study. However, they often collect data in the form of formative evaluations and observations of implementations leading to valuable insights that could lead to more rigorous controlled studies. In an earlier article, we described these articles as pre-research, that is, articles that suggest an approach of designing instruction or for improving the quality of the instruction that could provide a basis for research study (Morrison & Adcock, 1999). These articles, though, have an intrinsic value of their own. First, they can provide valuable information to other instructional designers in their work. While formative evaluations are designed for a specific case and often have little generalizability, the lessons learned from the evaluations can prove useful to others. Second, practitioner based articles can provide faculty with examples of realistic applications of instructional design in a variety of settings. The experiences from these articles can provide for a richer context and examples than one based on how to solve a math problem or how to setup a video projector (or depending on your age, how to thread a 16mm projector).

The Practice of Instructional Design and Reflection

Instruction design is an academic field reflected in numerous articles published in journals ranging from *ETR&D* to the *Journal of Educational Psychology.* Articles range from conceptual and theoretical pieces to intervention studies to qualitative studies to policy studies. However, instructional design is also a field of practice. This field of practice draws from the instructional design knowledge base to make informed instructional decisions. Outside of occasional informal communications and a relatively few studies, our scholarly research is seldom informed by the practice of instructional design. Thus, a journal like the *Journal of Applied Instructional Design* can provide one means of informing our scholarly research.

Instructional design is based on heuristics that are created and modified through practice (Morrison, Ross, Kalman, & Kemp, 2013; Romiszowski, 1981). Heuristics are general strategies designers use to solve problems in contrast to a rule-based approach that lacks flexibility. A key component of a heuristic approach is the designer's reflection on the instructional design process. Romiszoski (1981) describes a heuristic process and Schön (1983) describes a reflection process by practitioners as one of observing, experimenting, and testing hypotheses. If instructional designers can document this process, it could lead to substantive articles for this journal that make a significant contribution to our knowledge base. Such articles would also help inform the research and theory in the field of instructional design as well as the teaching of instructional design.

In addition to requiring research classes in our curriculum, faculty should also consider integrating reflection into the core instructional design courses to help students develop the skill. While reflection would be helpful for all students, it could become a particularly useful tool for practitioners to use as a basis for making scholarly contributions to the field. These contributions would build on the qualitative, quantitative, and mixed methods approaches students learned in graduate school. However, we might not expect the same rigor of research design when employed in a practical setting. As a field, we need to recognize the value of field-based research and help develop appropriate methods and standards so that practitioners can make contributions to our knowledge base.

Contributions from Practitioners

My goal in proposing this journal was to provide a means for those practicing instructional design a place to publish scholarly papers. Initially, I conceived three types of papers, but would not limit the focus of the journal to these three. The first category was papers based on reflections of a project and the resulting heuristics. For example, a designer might find a more efficient approach to a subject-matter expert interview when doing a concept analysis. Upon reflection, this approach could be translated into one or more heuristics that could published as paper. Second, a designer might publish an article based on a formative evaluation discussing the instruments and implementation with an analysis of the strengths and weaknesses of the evaluation. Consider a study by Burton and Aversa (1979) that considered the effectiveness of using scripts, scratch tracks, and rough cuts as part of a formative evaluation. Applications of new and unique formative evaluation strategies are often lost when the project is completed. This journal can provide a means of publishing articles describing these techniques. Third, developmental testing, small group testing, and field tests often test instructional interventions (Hsieh et al., 2005), but in a less controlled manner than we might in a research setting. Yet, the results of these formative evaluations can provide additional insights as they typically include learners who are motivated and have a reason to master the content. In contrast, the typical sophomore educational psychology students/subjects may not care how the brakes of a car work and are only interested in the incentive bonus points. Our prior research has found the benefits of a performance incentive compared to the typical task incentive of bonus points focused on learning unrelated content (Morrison, Ross, Gopalakrishnan, & Casey, 1995). Formative evaluations and traditional studies conducted in the field with performance incentives can provide us with valuable feedback and improve our understanding of how different instructional interventions work.

Academics and practitioners should consider submitting manuscript to this journal to better inform the field of the practice of instructional design. As a field, we need to refine the standards for scholarship for publishing data from field-based studies in the field of instructional design.

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